Space Weather Highlights **SWPC PRF 1967**
06 May - 12 May 2013 **13 May 2013**

Solar activity was low for the first half of the week, and moderate for the second. After a slow start with only low-level C-class flares from the regions on the disk, activity jumped up to moderate levels on 10 May when Region 1745 (N14, L=336, class/area=Ekc/600 on 12 May) unleashed an M3.9 flare at 0057Z shortly after rotating around the east limb. Later that same day, Region 1745 produced an M1.3 flare at 1256Z. Region 1745 and 1744 (N05, L=259, class/area=Dai/190 on 12 May) were the most productive regions on the disk during the week, with 10 C-flares each to their credit. Region 1744 was responsible for the largest C-class flare of the week, a C9.0 at 09/2316, immediately preceding the beginning of moderate activity. The 11th was relatively quiet; the largest flare was a C8.0 from Region 1746 (S27, L=337, class/area=Dhi/270 on 12 May) shortly after it emerged on the disk. However, there was a 16 degree filament eruption centered near N39W50 which began at 11/2230Z. The resulting CME was visible in LASCO/C2 coronagraph imagery by 12/0000Z. WSA-Enlil output suggested this CME may brush past Earth late on the 14th or early on the 15th. Moderate activity returned on 12 April with two M-class events, an M1.9 at 2032Z and an M1.2 at 2244Z, from a newly emerged region beyond the east limb.

No proton events were observed at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit was at normal to moderate levels all week.

Geomagnetic field activity was at quiet to unsettled levels all week. A positive polarity recurrent coronal hole high speed stream brought unsettled conditions for the first three days of the week. The remainder of the week saw quiet geomagnetic conditions.

Space Weather Outlook
13 May - 08 June 2013

Solar activity is expected to be at low levels with moderate activity likely and a chance for high activity levels throughout the forecast period.

No proton events are expected at geosynchronous orbit.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to be at high levels begiining on 24 May and lasting through 31 May in response to a recurrent coronal hole high speed stream. Normal to moderate levels are expected for the balance of the period.

Geomagnetic field activity is expected to be at quiet to unsettled levels through the period with the exception of 15-16, 21-23. amd 28-29 May. Unsettled to active levels are expected on 15-16 May with the arrival of a glancing blow from the CME observed on 12 May. Conditions are expected to be unsettled to active on 21-23 May, and 28-29 May with in response to recurrent coronal hole high speed stream. Another high speed stream may bring unsettled conditions on

2-4 June.

Daily Solar Data

Date	Radio Flux 10.7cm	Sun spot No.	Sunspot Area (10^{-6} hemi.)	X-ray Background Flux	Flares							
					X-ray			Optical				
					C	M	X	S	1	2	3	4
06 May	131	122	670	B5.5	6	0	0	6	0	0	0	0
07 May	129	118	670	B5.1	4	0	0	3	0	0	0	0
08 May	127	112	740	B4.3	4	0	0	2	0	0	0	0
09 May	128	154	945	B5.4	7	0	0	4	0	0	0	0
10 May	125	149	890	B6.7	8	2	0	4	1	0	0	0
11 May	137	145	1050	B7.8	7	0	0	6	0	0	0	0
12 May	147	173	1280	B8.5	13	2	0	1	0	0	0	0

Daily Particle Data

Date	Proton Fluence (protons/cm ^{2} -day -sr)			Electron Fluence (electrons/cm^2 -day -sr)		
	>1 MeV	>10 MeV	>100 MeV	>0.6 MeV	>2MeV	>4 MeV
06 May	2.9e+05	1.1e+04	2.6e+03		1.3e+07	
07 May	1.1e+05	1.1e+04	2.4e+03		1.4e+07	
08 May	1.1e+05	1.1e+04	2.7e+03		2.7e+07	
09 May	1.2e+05	1.1e+04	2.6e+03		3.5e+07	
10 May	9.7e+04	1.1e+04	2.8e+03		3.4e+07	
11 May	1.1e+05	1.1e+04	2.8e+03		3.0e+07	
12 May	1.0e+05	1.1e+04	2.5e+03		2.5e+07	

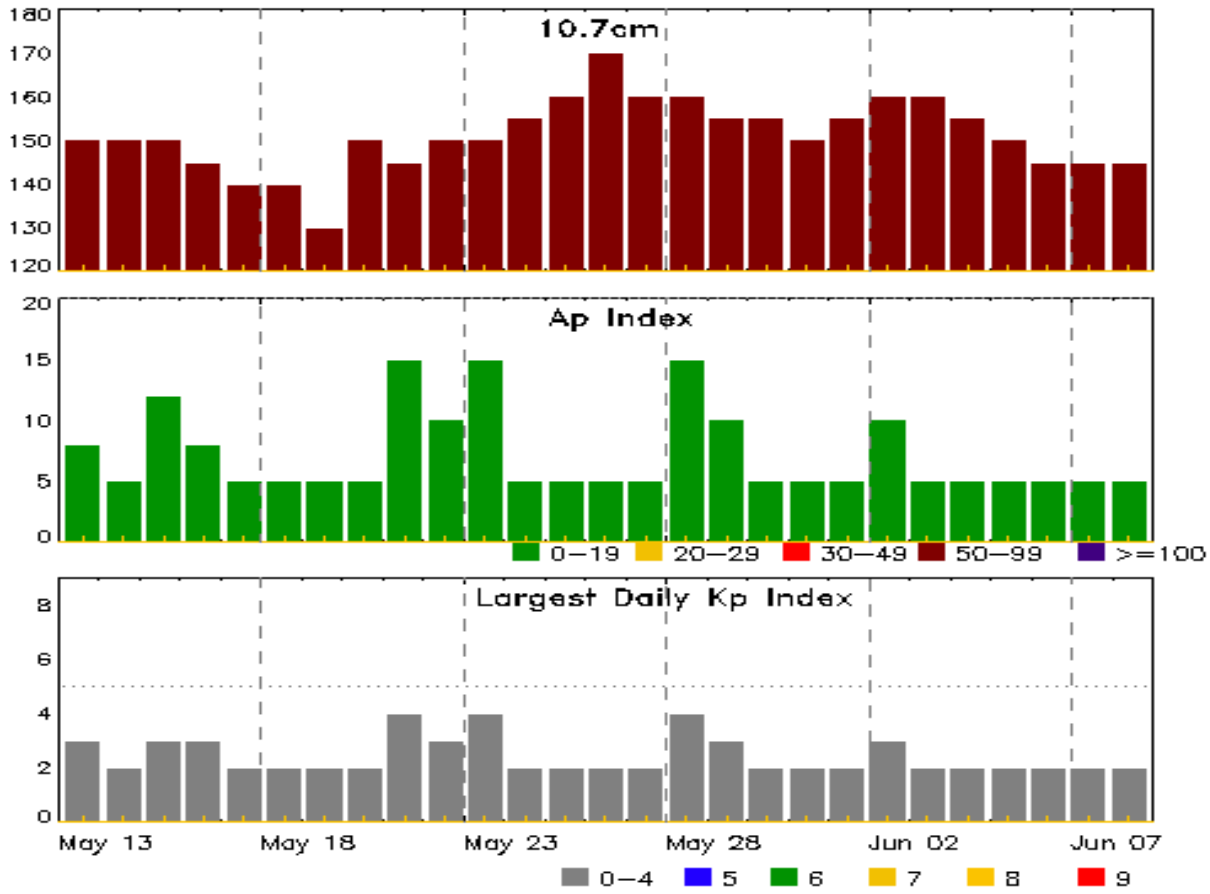
Daily Geomagnetic Data

Date	Middle Latitude Fredericksburg		High Latitude College		Estimated Planetary	
	A	K-indices	A	K-indices	A	K-indices
06 May	9	1-0-3-2-3-2-2-3	11	2-1-4-3-3-1-2-2	8	1-1-3-2-2-2-2-3
07 May	11	3-2-3-3-3-2-2-1	15	3-3-4-4-3-2-2-1	10	3-3-3-2-2-2-2-2
08 May	8	3-2-2-1-2-2-2-2	7	1-2-2-2-1-3-2-1	7	3-2-2-1-1-2-1-2
09 May	4	1-1-1-2-2-1-1-0	4	2-2-1-3-1-0-0-0	5	2-2-2-2-1-1-1-1
10 May	4	1-1-1-1-2-2-1-1	3	2-1-1-2-2-0-0-0	5	1-1-1-1-2-1-1-1
11 May	4	0-1-1-1-2-2-1-1	1	0-2-0-1-0-0-0-0	4	0-2-1-1-1-1-1-1
12 May	6	2-2-1-2-2-1-2-1	2	1-2-0-1-0-1-0-1	5	2-2-1-1-1-2-1-1

Alerts and Warnings Issued

Date & Time of Issue UTC	Type of Alert or Warning	Date & Time of Event UTC
06 May 0935	WARNING: Geomagnetic K = 4	06/1000 - 1500

Twenty-seven Day Outlook



Date	Radio Flux 10.7cm	Planetary A Index	Largest Kp Index	Date	Radio Flux 10.7cm	Planetary A Index	Largest Kp Index
13 May	150	8	3	27 May	160	5	2
14	150	5	2	28	160	15	4
15	150	12	3	29	155	10	3
16	145	8	3	30	155	5	2
17	140	5	2	31	150	5	2
18	140	5	2	01 Jun	155	5	2
19	130	5	2	02	160	10	3
20	150	5	2	03	160	5	2
21	145	15	4	04	155	5	2
22	150	10	3	05	150	5	2
23	150	15	4	06	145	5	2
24	155	5	2	07	145	5	2
25	160	5	2	08	145	5	2
26	170	5	2				

Energetic Events

	Time			X-ray		Optical Information			Peak Radio Flux		Sweep Freq Intensity	
Date	Begin	Max	Half Max	Class	Integ Flux	Imp/ Brtns	Location Lat CMD	Rgn #	245	2695	II	IV
10 May	0044	0057	0108	M3.9	0.036			1745				
10 May	1237	1256	1304	M1.3	0.013			1745				
12 May	2017	2032	2103	M1.9	0.037					65		
12 May	2237	2244	2252	M1.2	0.008							

Flare List

	Time			Optical			
Date	Begin	Max	End	X-ray Class	Imp/ Brtns	Location Lat CMD	Rgn #
06 May	0008	0013	0017	C2.3	SF	N11E42	1739
06 May	0103	0107	0109	C1.0			1739
06 May	0141	0146	0151	C1.0			1740
06 May	0158	0205	0213	C2.4	SF	N14E49	1739
06 May	0710	0710	0715		SF	N13E43	1739
06 May	0803	0808	0812	C1.3	SF	S17E75	1741
06 May	1211	1226	1233		SF	S19W12	1734
06 May	1459	1504	1511	C1.1			1731
06 May	1541	1542	1549		SF	S16W20	1734
07 May	0311	0314	0317	B8.0			
07 May	0535	0539	0543	C1.2			1736
07 May	0816	0823	0833	C1.6	SF	S18W28	1734
07 May	1116	1122	1135	B9.0	SF	S18W30	1734
07 May	1544	1552	1601	C1.4			1731
07 May	1912	1916	1919	B7.8	SF	S13W59	1732
07 May	2211	2218	2232	C1.3			1739
08 May	0015	0022	0030	C2.9	SF	N15E05	1738
08 May	0628	0639	0656	C1.1			
08 May	1101	1106	1107		SF	N32E71	
08 May	1641	1719	1752	C1.0			1731
08 May	1857	1905	1911	C1.1			1736
09 May	0114	0121	0136	B9.5			1736
09 May	0516	0523	0531	C3.4			1736
09 May	1220	1223	1225	B9.2			1736
09 May	1315	1318	1323		SF	N30E57	1742
09 May	1633	1642	1655	C1.4			
09 May	1736	1742	1811	C2.7	SF	N04E74	1744

Flare List

Date	Time			Optical			
	Begin	Max	End	X-ray Class	Imp/ Brtns	Location Lat CMD	Rgn #
09 May	1831	1833	1835		SF	N05E73	1744
09 May	1943	1943	1946		SF	N29E51	1742
09 May	2028	2031	2034	C1.3			1742
09 May	2052	2100	2117	C2.2			1744
09 May	2150	2201	2211	C1.6			1744
09 May	2252	2316	2332	C9.0			1744
10 May	0044	0057	0108	M3.9			1745
10 May	0115	0115	0117		SF	N05E73	1744
10 May	0240	0244	0247	C3.1			1744
10 May	0257	0301	0306	C2.1			1744
10 May	0401	0407	0414	C1.9			1745
10 May	0506	0509	0515	C1.2			1742
10 May	0742	0742	0744		SF	N06E70	1744
10 May	0904	0904	0912		SF	N11W14	1739
10 May	0944	0950	0956	C1.8			1745
10 May	1237	1256	1304	M1.3			1745
10 May	1430	1437	1442	C2.5			1745
10 May	1630	1643	1725	C2.5	1F	N14W18	1739
10 May	1733	1734	1737		SF	N15W16	1739
10 May	2235	2242	2248	C1.8			1745
11 May	0252	0256	0301	C1.3	SF	N03E56	1744
11 May	1029	1032	1035		SF	S25E75	1746
11 May	1236	1247	1306	C1.4	SF	S26E74	1746
11 May	1331	1359	1409	C2.2	SF	N11E74	1745
11 May	1413	1414	1417		SF	N13E75	1745
11 May	1622	1644	1650	C1.5			1734
11 May	1803	1805	1809	C1.0	SF	S27E71	1746
11 May	1848	1916	1923	C2.8			1739
11 May	1935	1948	2003	C8.0			1746
12 May	0200	0211	0216	C1.2			1745
12 May	0233	0253	0313	C1.1			1734
12 May	0321	0327	0331	C1.1			1744
12 May	0337	0341	0345	C1.2			1744
12 May	0411	0436	0445	C2.2			1746
12 May	0518	0527	0530	C1.2			1745
12 May	0558	0601	0603	C1.0			1734
12 May	0616	0619	0624	C1.3			1744
12 May	0626	0627	0629	C1.3			1745

Flare List

Date	Time			Optical			
	Begin	Max	End	X-ray Class	Imp/ Brtns	Location Lat CMD	Rgn #
12 May	0822	0826	0828	C1.5			1745
12 May	0857	0903	0914	C1.6			1743
12 May	0940	1023	1041	C1.6			1743
12 May	1557	1601	1605	C2.0	SF	N19E69	1745
12 May	2017	2032	2103	M1.9			
12 May	2237	2244	2252	M1.2			

Region Summary

	Location		Sunspot Characteristics					Flares							
		Helio	Area	Extent	Spot	Spot	Mag	X-ray			Optical				
Date	Lat CMD	Lon	10^{-6} hemi.	(helio)	Class	Count	Class	C	M	X	S	1	2	3	4
			Region 1731												
25 Apr	N07E61	189	270	6	Dkc	4	BG								
26 Apr	N09E51	187	300	9	Dkc	10	BG								
27 Apr	N09E37	187	420	10	Dkc	17	BG	1							
28 Apr	N09E25	187	420	10	Dkc	25	BG	11			12				
29 Apr	N09E11	188	350	12	Ekc	31	BG	3			10				
30 Apr	N09W03	188	380	12	Ekc	38	BGD	2			4				
01 May	N09W17	189	350	12	Ekc	36	BGD	6			10				
02 May	N09W31	190	320	12	Ekc	33	BGD	1	1		2	1			
03 May	N10W43	187	150	15	Eac	31	BGD	1	1		1		1		
04 May	N10W56	187	90	12	Eai	20	BG	3			3				
05 May	N09W71	189	140	13	Eai	8	BG	1			1				
06 May	N09W85	191	10	1	Axx	1	A	1							
								30	2	0	43	1	1	0	0

Crossed West Limb.
Absolute heliographic longitude: 188

			Region 1732												
27 Apr	S15E66	157	20	1	Hsx	1	A	2							
28 Apr	S17E54	158	30	1	Hsx	1	A				1				
29 Apr	S17E40	157	130	8	Dso	5	B	2			3				
30 Apr	S17E26	159	170	9	Dsi	11	B								
01 May	S17E12	160	180	9	Dsi	10	B	2			3				
02 May	S17W02	161	160	9	Dsi	7	B								
03 May	S17W15	161	160	8	Dso	7	B								
04 May	S17W22	153	150	6	Dso	12	B								
05 May	S17W35	153	90	6	Dso	4	B								
06 May	S17W49	155	90	6	Dso	4	B								
07 May	S17W63	156	90	6	Dso	4	B				1				
08 May	S17W77	157	80	5	Dso	3	B								
09 May	S17W90	157	80	6	Dso	3	B								
								6	0	0	8	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 161

Region Summary - continued

	Location		Sunspot Characteristics					Flares							
		Helio	Area	Extent	Spot	Spot	Mag	X-ray			Optical				
Date	Lat CMD	Lon	10^{-6} hemi.	(helio)	Class	Count	Class	C	M	X	S	1	2	3	4
			Region 1734												
29 Apr	S19E65	134	90	9	Dso	4	B								
30 Apr	S19E51	134	560	9	Dki	9	B								
01 May	S19E37	135	550	9	Dko	6	B	1							
02 May	S19E23	136	550	9	Dko	6	B	3			3	1			
03 May	S19E10	136	550	12	Eko	15	BG	2			2				
04 May	S17E04	127	590	11	Eki	22	BG	3			4				
05 May	S18W09	127	380	12	Eki	19	BG	1			2				
06 May	S18W23	129	370	11	Eki	17	B				2				
07 May	S18W37	130	370	11	Eki	17	B	1			2				
08 May	S18W51	131	350	10	Dko	12	B								
09 May	S18W64	131	400	10	Hkx	13	A								
10 May	S18W76	129	310	3	Hkx	2	A								
11 May	S19W88	128	310	5	Hkx	2	A	1							
								12	0	0	15	1	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 127

			Region 1736												
01 May	S07E34	138	10	3	Bxo	4	B								
02 May	S07E20	139	plage												
03 May	S07E05	141	plage												
04 May	S07W10	142	plage												
05 May	S07W25	144	plage												
06 May	S07W39	145	10	3	Bxo	3	B								
07 May	S07W53	146	10	3	Bxo	8	B	1							
08 May	S07W67	147	110	4	Dao	8	BG	1							
09 May	S08W78	145	240	7	Dai	12	BG	1							
10 May	S08W85	138	240	9	Dai	10	BG								
								3	0	0	0	0	0	0	0

Crossed West Limb.
Absolute heliographic longitude: 141

Region Summary - continued

	Location		Sunspot Characteristics					Flares							
		Helio	Area	Extent	Spot	Spot	Mag	X-ray			Optical				
Date	Lat CMD	Lon	10^{-6} hemi.	(helio)	Class	Count	Class	C	M	X	S	1	2	3	4
			Region 1737												
03 May	N19E35	115	10	2	Axx	1	A								
04 May	N16E21	110	10	1	Axx	1	A								
05 May	N16E07	112	plage												
06 May	N16W07	113	plage												
07 May	N16W21	114	plage												
08 May	N16W35	115	plage												
09 May	N16W49	115	plage												
10 May	N16W63	116	plage												
11 May	N16W77	117	plage												
								0	0	0	0	0	0	0	0

Died on Disk.
Absolute heliographic longitude: 112

			Region 1738												
03 May	N16E63	87	30	1	Hsx	1	A								
04 May	N15E47	84	10	2	Cso	2	B								
05 May	N15E34	84	30	3	Cao	3	B								
06 May	N15E20	86	50	7	Cao	5	B								
07 May	N15E06	87	60	7	Cai	7	B								
08 May	N15W08	88	70	8	Cai	8	B	1			1				
09 May	N15W21	88	50	10	Cai	8	B								
10 May	N17W33	86	30	8	Cai	7	B								
11 May	N17W43	83	40	5	Cao	4	B								
12 May	N17W59	86	10	8	Bxo	4	B								
								1	0	0	1	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 87

Region Summary - continued

	Location		Sunspot Characteristics					Flares							
		Helio	Area	Extent	Spot	Spot	Mag	X-ray			Optical				
Date	Lat CMD	Lon	10^{-6} hemi.	(helio)	Class	Count	Class	C	M	X	S	1	2	3	4
			Region 1739												
03 May	N13E75	75	150	10	Dac	13	B		1		1				
04 May	N13E57	74	110	6	Dac	5	BG	5			1				
05 May	N12E44	74	140	10	Dac	8	BG	7	1		12	1			
06 May	N12E30	76	110	10	Dai	7	BG	3			3				
07 May	N12E16	77	120	10	Dai	8	B	1							
08 May	N12E02	78	110	9	Dai	8	B								
09 May	N12W09	78	60	9	Dao	8	B								
10 May	N12W25	78	20	6	Cao	5	B	1			2	1			
11 May	N11W39	79	10	2	Bxo	2	B	1							
12 May	N11W53	80	0	1	Axx	1	A								
								18	2	0	19	2	0	0	0

Still on Disk.
Absolute heliographic longitude: 78

			Region 1740												
04 May	S20E64	67	30	1	Hsx	1	A								
05 May	S21E50	68	20	1	Hrx	1	A								
06 May	S21E36	70	20	2	Cao	3	B	1							
07 May	S21E22	71	10	2	Hsx	2	A								
08 May	S21E08	72	10	2	Axx	2	A								
09 May	S21W06	72	plage												
10 May	S21W15	68	10	4	Bxo	4	B								
11 May	S21W26	66	10	1	Axx	1	A								
12 May	S21W39	66	10	1	Axx	1	A								
								1	0	0	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 72

			Region 1741												
06 May	S20E59	45	10	3	Bxo	2	B	1			1				
07 May	S20E45	45	10	2	Axx	2	A								
08 May	S20E32	48	10	1	Axx	1	A								
09 May	S20E19	48	5	1	Axx	1	A								
10 May	S20E05	48	10	3	Bxo	2	B								
11 May	S21W05	45	50	5	Cao	11	B								
12 May	S23W18	45	30	6	Cao	9	B								
								1	0	0	1	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 48

Region Summary - continued

	Location		Sunspot Characteristics					Flares							
		Helio	Area	Extent	Spot	Spot	Mag	X-ray			Optical				
Date	Lat CMD	Lon	10^{-6} hemi.	(helio)	Class	Count	Class	C	M	X	S	1	2	3	4
			Region 1742												
09 May	N30E49	17	50	7	Dai	12	B	1			2				
10 May	N30E36	17	100	7	Dao	6	B	1							
11 May	N30E22	18	50	9	Dao	4	B								
12 May	N30E10	17	50	9	Cao	5	B								
								2	0	0	2	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 17

			Region 1743												
09 May	N24E55	11	30	5	Hrx	2	A								
10 May	N24E43	12	20	3	Cao	5	B								
11 May	N24E29	11	10	3	Bxo	4	B								
12 May	N24E15	12	110	5	Dao	10	B	2							
								2	0	0	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 12

			Region 1744												
09 May	N05E61	4	30	5	Dao	5	B	4			2				
10 May	N04E56	357	30	9	Dao	7	B	2			2				
11 May	N05E42	358	60	10	Dao	10	B	1			1				
12 May	N05E28	359	190	10	Dai	13	B	3							
								10	0	0	5	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 359

			Region 1745												
10 May	N11E73	340	120	3	Hrx	1	A	4	2						
11 May	N11E62	338	300	5	Dki	5	B	1			2				
12 May	N14E51	336	600	12	Ekc	15	BG	5			1				
								10	2	0	3	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 336

Region Summary - continued

	Location		Sunspot Characteristics					Flares							
		Helio	Area	Extent	Spot	Spot	Mag	X-ray			Optical				
Date	Lat CMD	Lon	10^{-6} hemi.	(helio)	Class	Count	Class	C	M	X	S	1	2	3	4
		Region 1746													
11 May	S27E63	335	210	5	Dso	2	B	3			3				
12 May	S27E50	337	270	8	Dhi	11	BG	1							
								4	0	0	3	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 337

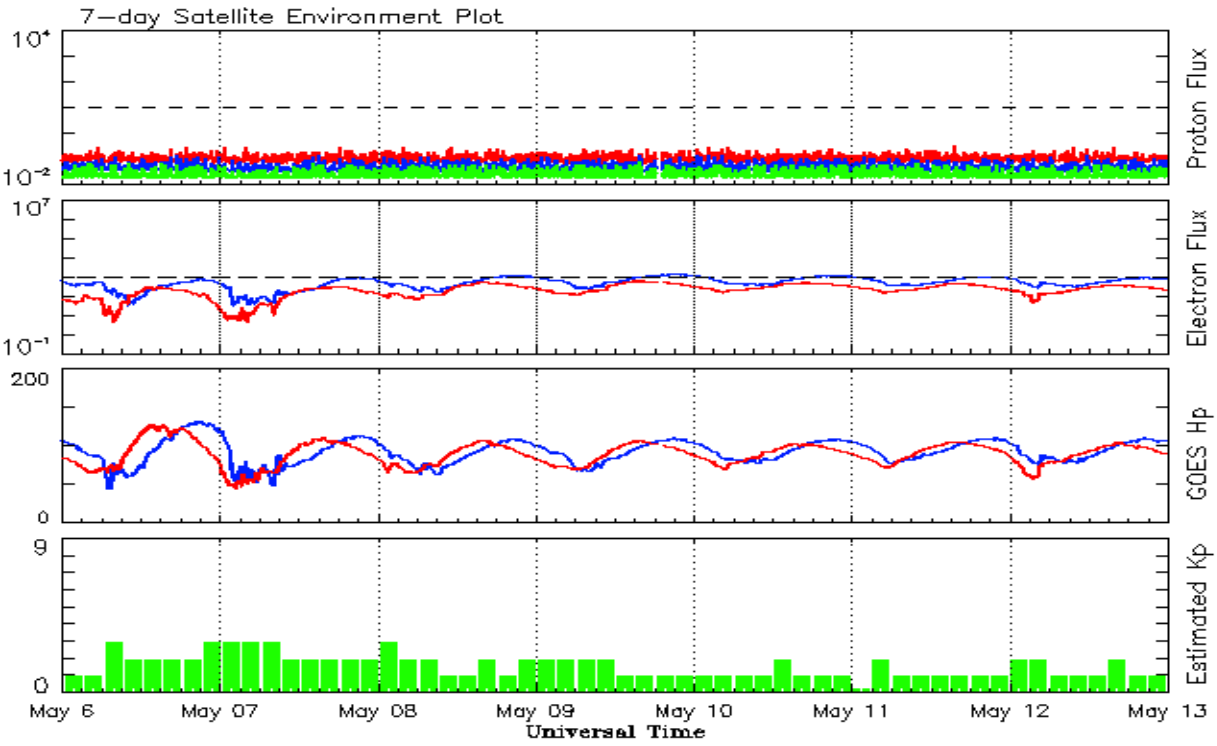
		Region 1747													
12 May	S18E48	338	10	2	Bxo	4	B								
								0	0	0	0	0	0	0	0

Still on Disk.
Absolute heliographic longitude: 338

Recent Solar Indices (preliminary)
Observed monthly mean values

	Sunspot Numbers					Radio Flux		Geomagnetic	
	Observed values		Ratio	Smooth values		Penticton	Smooth	Planetary	Smooth
Month	SEC	RI	RI/SEC	SEC	RI	10.7 cm	Value	Ap	Value
				2011					
May	61.4	41.6	0.68	69.0	47.6	95.9	105.6	9	7.5
June	55.5	37.0	0.67	76.5	53.2	95.8	110.9	8	7.4
July	67.0	43.8	0.66	82.5	57.3	94.2	115.4	9	7.3
August	66.1	50.6	0.77	84.9	59.0	101.7	117.9	8	7.4
September	106.4	78.0	0.73	84.6	59.5	134.5	118.4	13	7.7
October	116.8	88.0	0.75	84.6	59.9	137.2	118.4	7	8.0
November	133.1	96.7	0.73	86.3	61.1	153.1	119.5	3	8.0
December	106.3	73.0	0.69	89.2	63.4	141.2	121.6	3	8.0
				2012					
January	91.3	58.3	0.64	92.0	65.5	133.1	124.4	6	8.3
February	50.1	32.9	0.66	94.2	66.9	106.7	126.7	7	8.4
March	77.9	64.3	0.82	94.1	66.8	115.1	126.8	14	8.1
April	84.4	55.2	0.65	91.3	64.6	113.1	125.8	9	8.0
May	99.5	69.0	0.69	87.7	61.7	121.5	123.8	8	8.2
June	88.6	64.5	0.73	83.9	58.9	120.5	121.1	10	8.3
July	99.6	66.5	0.67	82.4	57.8	135.6	119.5	13	8.3
August	85.8	63.0	0.74	83.1	58.2	115.7	119.2	7	8.1
September	84.0	61.4	0.73	83.7	58.1	123.2	118.9	8	7.8
October	73.5	53.3	0.73	85.0	58.6	123.3	119.2	9	7.4
November	89.2	61.8	0.69			120.9		6	
December	60.4	40.8	0.68			108.4		3	
				2013					
January	99.8	62.9	0.63			127.1		4	
February	60.0	38.0	0.63			104.4		5	
March	81.0	57.9	0.71			111.2		9	
April	112.8	72.4	0.64			125.0		5	

Note: Values are final except for the most recent 6 months which are considered preliminary. Cycle 24 started in Dec 2008 with an RI=1.7.



Weekly Geosynchronous Satellite Environment Summary
Week Beginning 06 May 2013

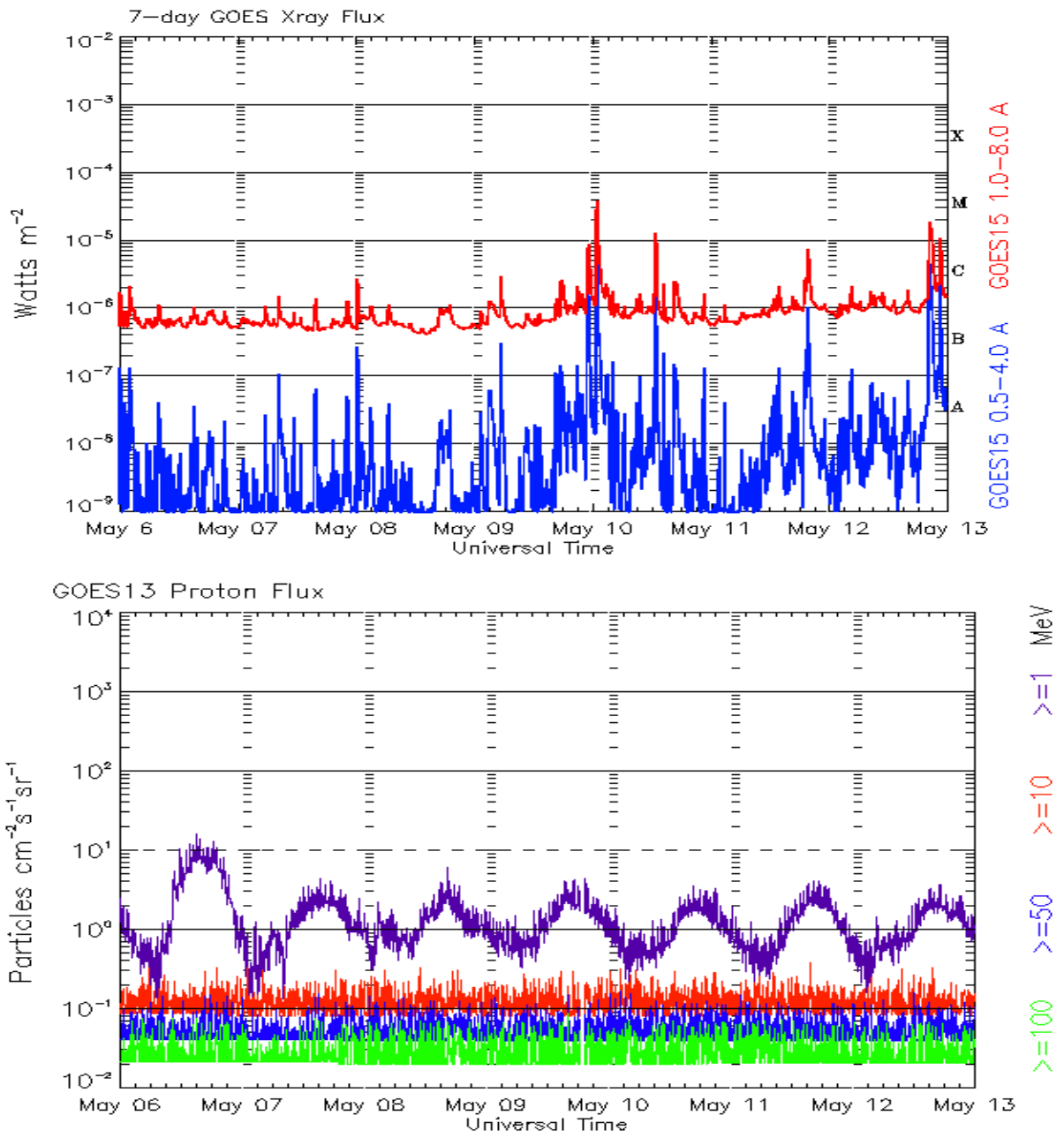
The proton flux plot contains the five-minute averaged integral proton flux (protons/cm^2-sec -sr) as measured by the SWPC Primary GOES satellite, near West 75, for each of three energy thresholds: greater than 10, 50, and 100 MeV.

The electron flux plot contains the five-minute averaged integral electron flux (electrons/cm^2-sec -sr) with energies greater than 2 MeV by the SWPC Primary GOES satellite.

The Hp plot contains the five minute averaged Hp magnetic field component in nanoteslas (nT) as by the SWPC Primary GOES satellite. The Hp component is parallel to the spin axis of the satellite, which is nearly parallel to the Earth's rotation axis.

The Estimated 3-hour Planetary Kp-index is derived at the NOAA Space Weather Prediction Center using data from the following ground-based magnetometers: Boulder, Colorado; Chambon la Foret, France; Fredericksburg, Virginia; Fresno, California; Hartland, UK; Newport, Washington; Sitka, Alaska. These data are made available thanks to the cooperative efforts between SWPC and data providers around the world, which currently includes the U.S. Geological Survey, the British Geological Survey, and the Institut de Physique du Globe de Paris.

The data included here are those now available in real time at the SWPC and are incomplete in that they do not include the full set of parameters and energy ranges known to cause satellite operating anomalies. The proton and electron fluxes and Kp are 'global' parameters that are applicable to a first order approximation over large areas. H parallel is subject to more localized phenomena and the measurements generally are applicable to within a few degrees of longitude of the measuring satellite.



Weekly GOES Satellite X-ray and Proton Plots
Week Beginning 06 May 2013

The x-ray plots contains five-minute averages x-ray flux (Watt/m^2) as measure by the SWPC primary GOES X-ray satellite, usually at West 105 longitude, in two wavelength bands, 0.05 - 0.4 and 0.1 - 0.8 nm. The letters A, B, C, M and X refer to x-ray event levels for the 0.1 - 0.8 nm band.

The proton plot contains the five-minute averaged intergral flux units (pfu = protons/cm^2 -sec -sr) as measured by the primary SWPC GOES Proton satellite for each of the energy thresholds: >1, >10, >30, and >100 MeV. The P10 event threshold is 10 pfu at greater than 10 MeV.

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Notice: The 27-day Outlook, Satellite Environment, X-ray and Proton plots have been redesigned. Comments and suggestions are welcome SWPC.Webmaster@noaa.gov

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